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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/795,803	03/08/2004	Adrianus Johannes Heinen	USP172145A	7714

7590 10/05/2006

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EXAMINER

AVERY, BRIDGET D

ART UNIT PAPER NUMBER

3618

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/795,803	HEINEN, ADRIANUS JOHANNES	
	Examiner	Art Unit	
	Bridget Avery	3618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19-25, 29 and 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19-22, 29 and 30 is/are rejected.
- 7) ☒ Claim(s) 23-25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____. |

Election/Restrictions

1. Applicant's election without traverse of Group II in the reply filed on July 24, 2006 is acknowledged.

An action on the merits of claims 19-25, 29 and 30 follows.

DETAILED ACTION

Claim Objections

2. Claims 23-25 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from a multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 19-22, 29 and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Claim 19 recites the limitation "said electrometer" in line 4. There is insufficient antecedent basis for this limitation in the claim.

5. In claims 19 and 30, applicant's recitation of "a rotor, coaxially and rotatably mounted within the stator" is confusing because the rotor surrounds the stator. It is suggested that applicant change "within" to --with--.

6. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 21 recites the broad recitation "wherein both axial ends of the rotor comprise attachment means", and the claim also recites "in particular for a driving shaft" which is the narrower statement of the range/limitation.

7. Claim 30 recites the limitation "said electrometer" in line 3. There is insufficient antecedent basis for this limitation in the claim.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 19-22 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Gritter et al. (US Patent 4,651,066).

Gritter et al. teaches a traction assembly including an electric motor (18) that directly drives wheels (12) of the vehicle (10), the electromotor is positioned outside of the wheels (as clearly shown in Figure 1), the electromotor having a housing (defined by 30, 38, 42, 80, 82 and 84); a stator assembly (96) connected to the housing and including at least two groups of physically separated windings (A and B; 50 and 52); a rotor (26), coaxially and rotatably mounted with the stator and including permanent magnets, the rotor is stationary with respect to the axis of rotation of the rotor during operation (starting) of the electromotor (note: positioner 224 operates to mechanically lock the rotor); a controller (46) that controls electric current in the windings (as clearly stated in col. 7, lines 14-23); at least one measurement tool that measures an angular position of the rotor with respect to the stator (see col. 7, lines 14-18); operating means connected to the controller (46) and the at least one measurement tool; data communication means (211 as clearly shown in Figure 3) connected to the operating means for communicating data to outside the housing. The vehicle is self-propelled by the traction assembly. Re claim 20, the two means for measuring a magnetic field is inherent because of the teaching of a "magnetic circuit". Re claim 22, both axial ends of

Art Unit: 3618

the rotor include attachment means (see bushing 148 and bearing 156) for the driving shaft (28). Re claim 30, Gritter et al. clearly teaches the method for driving a wheel of a vehicle, including directly driving the wheel with an electromotor; providing a stator connected to the motor housing; providing a rotor, coaxially and rotatably mounted with the stator; where the rotor is stationary with respect to the axis of rotation of the rotor during operation (startup) of the electromotor; controlling electric current in the windings; measuring an angular position of the rotor with respect to the stator; operating the electromotor in accordance with the controlled electric current and measured angular position and communicating data to outside the housing.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gritter et al. ('066) in view of Tsutsumi (US Patent 5,214,332).

Gritter et al. teaches the features described above.

Gritter et al. lacks the teaching of a housing that completely encloses the rotor.

Tsutsumi teaches a housing/casing (40) that completely encloses the rotor (48).

Based on the teachings of Tsutsumi, it would have been obvious to one having ordinary skill in the art, to modify the structure of Gritter et al. to include a housing that completely encloses the rotor to protect the motor components against corrosion.


Conclusion

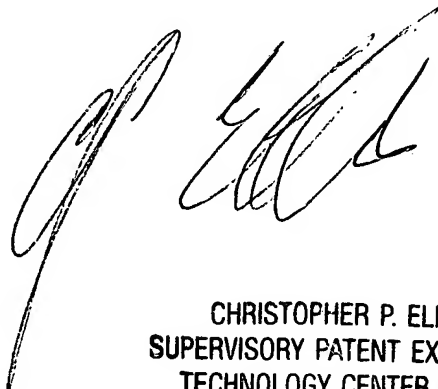
10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Strothmann shows an electric auxiliary drive.

Mutoh et al. shows an electric vehicle drive system and drive method.

11. Any inquiry concerning this communication should be directed to Bridget Avery at telephone number 571-272-6691.


Avery
September 28, 2006


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